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**October 20, 2005 GMAP Report**

## **Highway Project Delivery Back-Up Slides**



Slide 3: What are the sources of highway capital funding and what performance data is available?

## DOT 2005-2007 Highway Construction Budget

### By Program and Funding Source

(In Millions of Dollars)

Pgm Code	Program Title	Funding Source			
		Pre-existing	2003 Nickel	2005 TPA	Total
I	Hwy. Improvements	336.7	1,174.5	519.3	2,030.5
I	Tacoma Narrows Bridge	272.3			272.3
I	Total Highway Improvements	609.0	1,174.5	519.3	2,302.8
P	Hwy. Preservation	402.8	10.6	25.9	439.3
P	Hwy. Preservation Hood Canal	96.1		113.6	209.7
P	Total Highway Preservation	498.9	10.6	139.5	649.0
<b>Total Hwy. Improvements and Preservation</b>		<b>1,107.9</b>	<b>1,185.1</b>	<b>658.8</b>	<b>2,951.8</b>
Percent of Total		38%	40%	22%	100.0%

# Highway Project Delivery Back-Up Slides

## Slide 4: How has the problem of project definition been addressed?

### Current Highway Project Definition Matrix

Appropriation Level	Improvement Program					Preservation Program	
Budget Level	Stand Alone Project	Project-Group	Corridor	Sub-Corridor	Mega/Major Project	Stand Alone Project	Project-Group
Definitions A “project” is defined as such (and counted) if it has a construction phase.	Single project correcting a deficiency at a specific location	Projects correcting one or more deficiencies at a specific or multiple locations (i.e. cable median barriers; fish passage; noise walls)	Series of projects with a common strategy to correct a deficiency	Subset of a corridor that is comprised of 2 to 4 projects with a common strategy to correct a deficiency	Capital improvement with multiple components over 1 or 2 biennia. Components do not result in useable/operational segment	Major preservation projects such as Hood Canal or Tacoma Narrows Bridge	Bridge Preservation or Replacement and Pavement projects or programs
Measurement Unit	Individual	Programmatic	Individual *	Individual*	Individual	Individual	Programmatic
Measurement Type	Milestones; Budget	Budget; Program Accomplishments and roll-ups (may vary by group)	Milestones by projects;  *Budget by Corridor	Milestones by project;  *Budget by Sub-Corridor	Milestones and Budget by Mega/Major Project	Milestones and Budget by Project	Budget; Program accomplishments (i.e., number of seismic retrofits, lane miles paved) bridge and pavement system condition rating



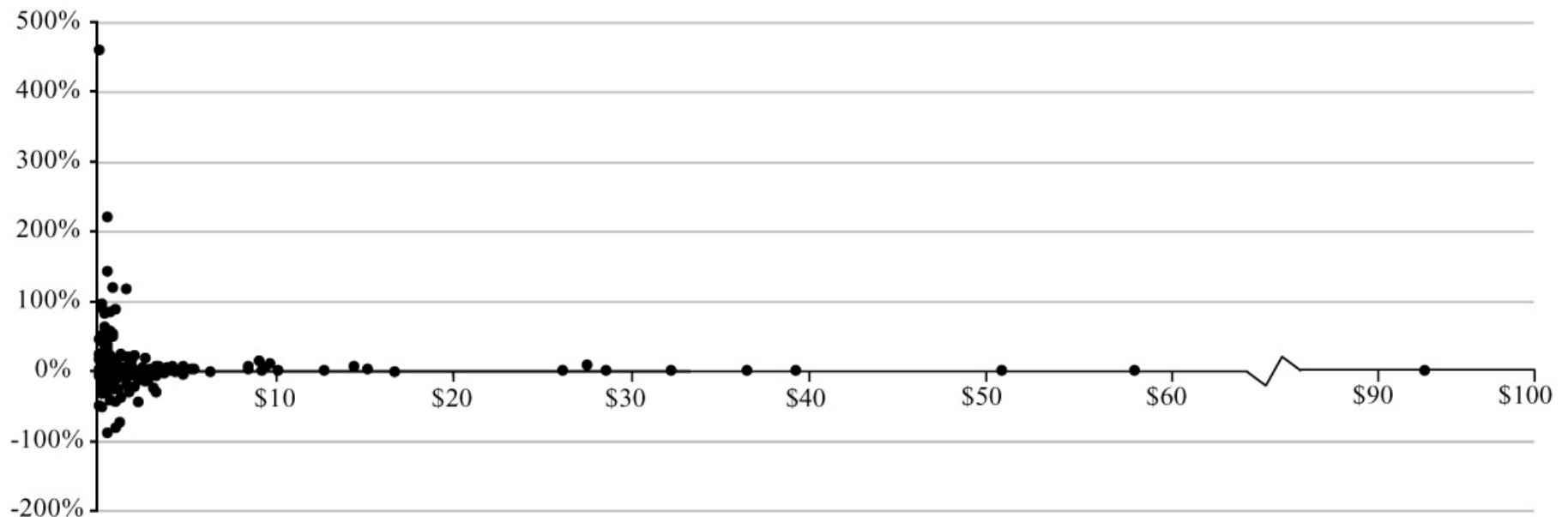
## Highway Project Delivery Back-Up Slides

Slide 9: What were the main problems revealed in the 93 projects in 2003-05 that did not meet the budget target?

### 93 Projects Over Budget

Percent Over Target by Original Budget

*Dollars in Millions*





## Slide 12: Which delivery milestones will be tracked for 05-07?

### Scheduled Milestone Definitions

#### **Milestone 1. Project Definition Complete to Best Available Level**

Project definition entails determining the function, limits, and boundaries of the project at hand, providing enough information so that a preliminary cost estimate can be established.

#### **Milestone 2. Begin Engineering Phase**

A project schedule is usually broken into two general phases, the preconstruction phase and the construction phase. Preconstruction involves design, right of way, and environmental activities. Beginning the preliminary engineering marks the start of the project design and is usually the first activity in delivering the project.

#### **Milestone 3. Environmental Assessment Complete**

Most projects involve environmental processes requiring documentation prior to advertisement. These activities occur parallel to and are coordinated with the design process. This milestone is a good indicator of whether decision makers from other agencies will have the necessary information in hand and in time to make a decision on permits to keep the project on schedule.

#### **Milestone 4. Right of Way Certification**

Often WSDOT projects require purchasing right of way. The Right of Way Certification marks the point in time that several right of way requirements are met and the process is complete for advertisement.

#### **Milestone 5. Advertisement (Ad Date)**

This is the date that WSDOT schedules to publicly advertise a project for bids from pre-qualified contractors. When a project is advertised, it has a completed set of plans, specifications, along with an estimate prepared by the Department of what the work should cost. At this point, the Department will have obtained all necessary permits, right of way, and funding. During the advertisement period, prospective contractors review the bidding documents very closely in order to prepare their bid. This intense scrutiny may identify errors, omissions, or ambiguities in the plan and specifications. When these occur, the Department will issue an addendum to the plans and specifications to make corrections or clarifications so that they will be included in the competitive bidding process.

#### **Milestone 6. Operationally Complete**

This is the date when the intended end user (the public in the case of facilities such as highway and ferry terminals, WSDOT employees in the case of facilities) has free and unobstructed use of the facility. In some cases, the facility will be open, but minor work items may remain to be completed.



# Highway Project Delivery Back-Up Slides

**Slide: 15 What are the pre-construction delays for 10 projects reviewed by JLARC for TPAB?**

## Pre-Construction Project Delivery Risks for Ten Projects

TPAB Study Results: Root Causes (X) of Delays on Project Delivery and  
Associated Effects (E) on Other Activities (pre-construction)

Project Title	Plan-ning	Design	Environmental Documentation	Environmental Permitting	Right of Way Acquisition	Third Party Laws	Funding Delays or Interruptions
I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road		E	E	E			X
SR31, Metaline Falls to International Border		E	E	X		X	X
SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue		E		E	E	X	X
SR161, Milton to Federal Way, Jovita Blvd. To S 360 <sup>th</sup> Widening				X			X
SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	X	E	E	E			X
SR 240, Richland, I-182 to Columbia Center Boulevard	E	E		X	X		X
US 12, Southeast of Pasco, McNary Pool to Attalia							X
I-5, Chehalis, Rush Road to 13 <sup>th</sup> Street (Note: permitting had not begun as of study report)							
SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac (Note: permitting had not begun as of study report)	X	E	X	X	E		X
I-405, Kirkland Nickel Project, from SR 529 to 522				X			X

Slide: 16 Workforce: How does fluctuating transportation funding impact workforce management?

## Highway Capital Program Trends

Actual and Projected Dollars and FTEs for 1987-2015

Dollars in Millions

